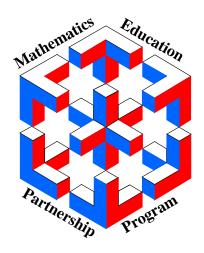
## Mathematics & NSA: A Long Term Partnership



2004

**Summer Institute** 

for

Middle School

**Mathematics Teachers** 

Middle School mathematics and science teachers are invited to apply to attend the 2004 National Security Agency (NSA) Summer Institute:

- Held June 28-July 2, 2004
- Hosted by Anne Arundel County (Maryland) Public Schools

### **Successful applicants:**

- Learn and apply the latest techniques for mathematics classrooms
- Co-author learning units for publication and distribution nationwide
- Receive a stipend of \$500
- Receive free manipulatives and other valuable educational supplies
- May receive in-service credits
- Receive a continental breakfast and lunch each day

Participants can expect to work hard and have fun in a professional, energetic, fast-paced environment. The enclosed application must be postmarked no later than 9 April, 2004.

#### WHAT IS THE SUMMER INSTITUTE FOR MATHEMATICS TEACHERS?

In partnership with Anne Arundel County Public Schools, the National Security Agency's Mathematics Education Partnership Program sponsors Summer Institutes for Mathematics Teachers (SIMT). These Institutes provide teachers an intensive five-day opportunity to learn and apply the latest techniques for mathematics classrooms using a wide variety of methods and technology.

During the week-long institute, participants will attend two of four strands:

- Algebraic Reasoning topics will include variables, operations, and functions with problem solving in small groups.
- Geometric Reasoning- emphasis will be on conceptual understanding, multiple representations, mathematical modeling, and problem solving.
- Reasoning about Probability topics will include probability models, statistical graphing, and applications of probability and statistics.
- Proportional Reasoning recognize quantities that are related proportionally, using tables, numbers, graphs, and equations to investigate these quantities and their relationships.

Each of these strands is in accordance with the NCTM Standards and will be interwoven with the use of the TI-73 graphing calculator. In addition, participants will attend special lectures by NSA mathematicians on topics such as cryptanalysis, mathematical thinking, and coding theory.

Participants will be part of a team that will develop a learning unit designed to incorporate the Maryland State Core Learning Goals and the NCTM Standards. NSA maintains ownership of the learning units and publishes and distributes them free of charge upon request from educational institutions or teachers. They may also be available via the Internet.

Participants will be required to attend two follow-up sessions, one in the fall and one in the spring (probably Dec. 8, 2004 and Mar. 1, 2005). During these sessions, they make final changes to the learning units, hear guest speakers, and present the learning units to the Institute.

Participants will receive a \$500.00 stipend if they complete the entire 40-hour program during the summer and provide a learning unit suitable for review by representatives of the Maryland Council of Teachers of Mathematics. After attending both follow-up sessions, participants may receive in-service credits depending on the requirements of their state (MSDE has approved 3 in-service credits).

#### **HOW CAN YOU BE A PART OF THE 2004 SIMT?**

Middle School mathematics and science teachers are invited to apply. We are looking for both experienced and novice teachers from both public and private nonprofit schools. Most importantly, we are looking for teachers who are excited about teaching, who work well with others, and who like to participate!

#### THE NEXT STEP

The enclosed application must be completed, signed by both you and your principal, and returned no later than 9 April 2004. Neatness and thoroughness count! Incomplete applications will not be considered. You may attach one of your lesson plans or units as an example of your writing and planning skills.

# **Application**

## 2004 Middle School Summer Institute for Mathematics Teachers

### PLEASE TYPE OR PRINT CLEARLY

1. Name		
last	first	middle initial
2. School where employed		
name of school	street address	
Public Private	city/state/zip code	
county where school is located	(area code) telephone number	e-mail address
3. Residence		
(area code) telephone num	r street address	
	city/state/zip code	
4. Male/FemaleSocial Security	Number	
5. US Citizen? YesNo	Date of Birth	
6. <b>Ethnicity</b> African American Asian/Pacific Islander _	White Hispanic Other (Specify)	
7. Number of years middle school t	teaching experience	
8. Highest degree earned	area of specialization	
9. Course(s) taught 2003-2004 scho	ool year	
10. Have you ever attended a SIM	<b>Γ?</b> If yes, when?	
11. Please indicate your preference first choice, "2" by your second choi  Algebraic R  Geometric I  Reasoning a  Proportiona	ce, "3" by your third choice, and "4" leasoning Reasoning about Probability	

12. Continuing Education	On a separate piece of pap	per, indicate:		
Name of program	<b>Host organization</b>	<b>Length</b>	<b>Date</b>	Your role
13. Reasons for Participati middle school mathematics	_		_	
14. Support of Administra	tion Your school principal	must sign the fol	llowing for y	ou to be considered for
the Institute:				
I recommend this applicant the applicant's efforts to conthe applicant's attendance credits, the applicant must a substitutes. (Teachers from sessions if they are not intername and phone number on both in paper copy and on the	at the two follow-up session at the two follow-up session attend these follow-up session states outside the mid-Atlantested in receiving MSDE at this applicant's learning up	itute to other teachons. I understand sions and that NSA antic region are no credit). I also co	hers at my so I that in orde A will provic ot required to onsent to the	chool and I will support r to be eligible for MSDE le no reimbursements for attend the follow-up inclusion of my school's

15. **Applicant Consent Statement** You must sign the application in order to be considered for the institute.

I consent to NSA's ownership, publication, and distribution, both in paper copy and on the Internet of the learning units I write, to include my name, school name, and school phone number. I also consent to NSA's producing and using photographic or videotape images of me for purposes of including such images in informational packages regarding these institutes.

PRIVACY ACT STATEMENT: Auth: 10 U.S.C. § 2193; SSN: EO 9397. PURPOSE: administer cooperative agreements with area schools. ROUTINE USES: disclosure to (1) agency officials administering the program, (2) school cooperative agreement administrators and (3) teacher participants (contact information only). Disclosure of the information, including Social Security Numbers, is voluntary. Failure to furnish the requested information may result in non-selection, non-participation, or non-payment in the program. Your signature indicates you have read and understand the above.

Applicant's signature	
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Application must be postmarked by **April 9, 2004.** Send to:

Principal's signature\_

Principal's name (printed)

National Security Agency 9800 Savage Road Suite 6274 Ft. Meade, MD 20755-6274 ATTN: Chuck Brown, EL/MEPP, Room 2B6030

Applications can be faxed to the MEPP at 443-479-1193, Attn: Chuck Brown MEPP can be contacted via e-mail at the address cjbrown@nsa.gov